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EXAMINER
TRUONG, THANHNGA B

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/503,096	AUGUST ET AL.
	Examiner	Art Unit	
	Thanhnga B. Truong	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

    A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>*02/10/2005 (Amendment)*</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-26* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)		4) ☐ Interview Summary (PTO-413)	
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Mail Date. _____ .	
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		5) ☐ Notice of Informal Patent Application (PTO-152)	
Paper No(s)/Mail Date _____ .		6) ☐ Other: _____ .	

DETAILED ACTION

1.   Applicant's amendment filed on February 10, 2005 has been entered.
Claims 1-26 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for
all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Chen et al (US 6,314,192), and further in view of Moskowitz et al (US5,822,432).

        a.   *Referring to claim 1:*

                i.   Chen teaches:

                        (1)   embedding a watermark within said principal program,
first transmitting said principal program with the embedded watermark to said one or
more subscribers **[i.e. as shown in Figure 1, embedding a digital watermark signal
into a host signal (for example, a particular copy of a software product sold to a
customer) (column 1, lines 22-25). In addition, "transmit" means to enable a
signal to be transferred from an information embedding system to an information
extracting system over a communication channel (column 8, lines 50-54)];**

                        (2)   decoding said embedded watermark to determine the
specific related data to be transmitted to said one or more subscribers, the specific
related data including at least one of an offer to said one or more subscribers, telephone
number, World Wide Web address, coupon, and advertisement; and second
transmitting, in response to said decoded watermark, said specific data related to said
principal program to said one or more subscribers through a communications network
**[i.e., "decoding" functions that seek to extract the watermark signal from the
composite signal. Such functions may also be referred to as transmitting and**

receiving functions, indicating that the composite signal is transmitted over a channel to the receiver (column1, 34-38)].

      ii.   Although, Chen does not clearly and explicitly states:

      (1)   the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement. Chen, however, includes other types of values of host-signal components include color; measures of intensity other than the illustrative greyscale; texture; amplitude; phase; frequency, real numbers; integers; imaginary numbers; text-character code; parameters in a linear or non-linear representation of the host signal, and so on **(column 8, lines 11-16).**

      iii.   Besides, Moskowitz teaches:

      (1)   Metering watermarks could contain account information or other payment information which would facilitate the transaction. Watermarks can also be made to contain information pertaining to geographical or electronic distribution restrictions, or which contain information on where to locate other copies of this content, or similar content. For instance, a watermark might stipulate that a recording is for sale only in the United States, or that is to be sold only to persons connecting to an online distribution site from a certain set of internet domain names, like ".us" for United States, or ".ny" for New York. Further a watermark might contain one or more URLs describing online sites where similar content that the buyer of a piece of content might be interested in can be found **(column 9, lines 26-40).** In addition, claim 32 of Moskowitz teaches identifying a digital sample stream in which the digital watermarks are to be encoded wherein the digital watermarks contain at least one of a geographical constraint on distribution , a logical constraint on distribution, a Universal Resource Locator, a telephone number, an Internet Protocol address, an Internet domain name, an E-mail address, and a file name **(column 13, line 34 through column 14, line 5).**

      iv.   It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1)   clearly mention and/or include information that is embedded in the watermark as in Chen's invention since a purpose of many of such digital watermarking systems is to embed the watermark signal so that it is difficult to detect, and so that it is difficult to remove without corrupting the host signal (column 1, lines 26-30 of Chen).

v.   The ordinary skilled person would have been motivated to:

(1)   clearly mention and/or include information that is embedded in the watermark as in Chen's invention for providing authentication of signals or detecting tampering (column 1, lines 30-31 of Chen).

b.   *Referring to claim 2:*

i.   Chen further teaches:

(1)   wherein said decoding step further comprises decoding said watermark at a receiver located at said one or more subscribers **[i.e., as shown in Figure 9, from the receiver end, replicator 930 provides values 922 to point decoder 930 for decoding each watermark-signal component embedded in each co-processed group of host-signal components (column 34, lines 55-58)].**

c.   *Referring to claim 3:*

i.   Chen further teaches:

(1)   receiving said principal program at a central location **[i.e., as shown in Figure 1, computer system 110b, that is, for "receiving said principal program at a central location"];**

(2)   decoding said embedded watermark at said central location **[i.e., as shown in Figure 2b, information extractor 202, that is, for "decoding said embedded watermark at said central location"];** and

d.   *Referring to claim 4:*

i.   Chen teaches:

(1)   determining whether said principal program includes an embedded watermark **[i.e., "host signal" means a signal into which a watermark signal is to be embedded (column 7, lines 62-63)];**

(2)   decoding said embedded watermark from said principal program; and transmitting, in response to said watermark, said specific related data to said one or more subscribers, over a communications network, the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement **[i.e., "decoding" functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal is transmitted over a channel to the receiver (column1, 34-38)].**

    ii.   Although, Chen does not clearly and explicitly states:

(1)   the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement.   Chen, however, includes other types of values of host-signal components include color; measures of intensity other than the illustrative greyscale; texture; amplitude; phase; frequency, real numbers; integers; imaginary numbers; text-character code; parameters in a linear or non-linear representation of the host signal, and so on **(column 8, lines 11-16).**

    iii.   Besides, Moskowitz teaches:

(1)   Metering watermarks could contain account information or other payment information which would facilitate the transaction. Watermarks can also be made to contain information pertaining to geographical or electronic distribution restrictions, or which contain information on where to locate other copies of this content, or similar content. For instance, a watermark might stipulate that a recording is for sale only in the United States, or that is to be sold only to persons connecting to an online distribution site from a certain set of internet domain names, like ".us" for United States, or ".ny" for New York. Further a watermark might contain one or more URLs describing online sites where similar content that the buyer of a piece of content might be interested in can be found **(column 9, lines 26-40).** In addition, claim 32 of Moskowitz teaches identifying a digital sample stream in which the digital watermarks are to be encoded wherein the digital watermarks contain at least one of a

geographical constraint on distribution , a logical constraint on distribution, a Universal Resource Locator, a telephone number, an Internet Protocol address, an Internet domain name, an E-mail address, and a file name **(column 13, line 34 through column 14, line 5).**

       iv.   It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

       (1)   clearly mention and/or include information that is embedded in the watermark as in Chen's invention since a purpose of many of such digital watermarking systems is to embed the watermark signal so that it is difficult to detect, and so that it is difficult to remove without corrupting the host signal **(column 1, lines 26-30 of Chen).**

       v.   The ordinary skilled person would have been motivated to:

       (1)   clearly mention and/or include information that is embedded in the watermark as in Chen's invention for providing authentication of signals or detecting tampering **(column 1, lines 30-31 of Chen)**.

       e.   *Referring to claim 5:*

       i.   This claim has limitations that is similar to those of claim 3 (2), thus it is rejected with the same rationale applied against claim 3 (2) above.

       f.   *Referring to claim 6:*

       i.   This claim has limitations that is similar to those of claim 3, thus it is rejected with the same rationale applied against claim 3 above.

       g.   *Referring to claim 7:*

       i.   Chen further teaches:

       (1)   wherein said watermark includes a pointer to said specific related data stored in a database, further comprising the step of retrieving said specific data from said database prior to said transmitting step **[i.e., Figure. 4B is one illustrative embodiment of watermark signal 102 that is an eight-bit message; for example, a binary serial number. There are thus 256 possible serial numbers. As is evident, such illustrative serial numbers may be the binary numbers themselves, or the binary numbers may represent numbers, text, or other**

representations contained in a look-up table, or other data structure, indexed by the binary numbers or related pointers (column 16, lines 22-30). Figure 2A shows the "decoding" functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal, which inherently includes "special data", is transmitted over a channel to the receiver (column1, 34-38)].

    h.   *Referring to claim 8:*

        i.   This claim has limitations that is similar to those of claim 7, thus it is rejected with the same rationale applied against claim 7 above.

    i.   *Referring to claim 9:*

        i.   Chen further teaches:

        (1)   wherein said central location is a re-broadcaster of said principal program to said one or more subscribers [i.e., in this application, each commercial is watermarked, and automated detection of the watermark is used to determine the number of times and time of day that the broadcaster, which is computer system 110a, played the commercial (column 1, lines 49-52)].

    j.   *Referring to claim 10:*

        i.   Chen further teaches:

        (1)   wherein said re-broadcaster is the Head-end office of a cable provider [i.e., "the Head-end office of a cable provider" is considered a computer system 110a in Figure 1].

    k.   *Referring to claim 11:*

        i.   Chen further teaches:

        (1)   wherein said re-broadcaster is a satellite broadcast transmitter station [i.e., "a satellite broadcast transmitter station" is considered a computer system 110a in Figure 1].

    l.   *Referring to claim 12:*

        i.   Chen further teaches:

(1)   wherein said re-broadcaster is an Internet service provider **[i.e., "an Internet service provider" is considered as a computer system 110a in Figure 1].**

m.   *Referring to claim 13:*

i.   Chen further teaches:

(1)   appending demographic data to said secondary specific related data prior to said transmitting step, wherein said transmitting said specific related data includes transmitting said demographic data **[i.e., "host signal" means a signal into which a watermark signal is to be embedded. In one illustrative example, a host signal is a black-and-white image having 256.times.256 (=65,536) pixels, that is, " a demographic data", whereas each pixel having a grey scale value (column 7, lines 62-65). "Transmit" means to enable a signal (typically, a composite signal) to be transferred from an information embedding system to an information extracting system over a communication channel (column 8, lines 51-54)].**

n.   *Referring to claim 14:*

i.   Chen teaches:

(1)   a decoder for decoding a watermark embedded in a principal program, wherein said watermark contains data from which said specific related data may be identified, the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement **[i.e., as shown in Figure 9, a point decoder, that is, for "decoding a watermark embedded in a principal program", wherein reconstructed watermark signal 106 includes "data from which said specific related data may be identified"]; and**

(2)   delivery means for delivering said specific data related to said principal program to a receiving device associated with said one or more subscribers in response to the decoded watermark **[i.e., "decoding" functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that**

the composite signal is transmitted, that is "for delivering said specific data related to said principal program", over a channel to the receiver (column1, 34-38)].

     ii.   Although, Chen does not clearly and explicitly states:

     (1)   the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement. Chen, however, includes other types of values of host-signal components include color; measures of intensity other than the illustrative greyscale; texture; amplitude; phase; frequency, real numbers; integers; imaginary numbers; text-character code; parameters in a linear or non-linear representation of the host signal, and so on **(column 8, lines 11-16).**

     iii.   Besides, Moskowitz teaches:

     (1)   Metering watermarks could contain account information or other payment information which would facilitate the transaction. Watermarks can also be made to contain information pertaining to geographical or electronic distribution restrictions, or which contain information on where to locate other copies of this content, or similar content. For instance, a watermark might stipulate that a recording is for sale only in the United States, or that is to be sold only to persons connecting to an online distribution site from a certain set of internet domain names, like ".us" for United States, or ".ny" for New York. Further a watermark might contain one or more URLs describing online sites where similar content that the buyer of a piece of content might be interested in can be found **(column 9, lines 26-40).** In addition, claim 32 of Moskowitz teaches identifying a digital sample stream in which the digital watermarks are to be encoded wherein the digital watermarks contain at least one of a geographical constraint on distribution , a logical constraint on distribution, a Universal Resource Locator, a telephone number, an Internet Protocol address, an Internet domain name, an E-mail address, and a file name **(column 13, line 34 through column 14, line 5).**

     iv.   It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1)   clearly mention and/or include information that is embedded in the watermark as in Chen's invention since a purpose of many of such digital watermarking systems is to embed the watermark signal so that it is difficult to detect, and so that it is difficult to remove without corrupting the host signal **(column 1, lines 26-30 of Chen).**

v.   The ordinary skilled person would have been motivated to:

(1)   clearly mention and/or include information that is embedded in the watermark as in Chen's invention for providing authentication of signals or detecting tampering **(column 1, lines 30-31 of Chen).**

o.   *Referring to claim 15:*

i.   This claim has limitations that is similar to those of claim 14, thus it is rejected with the same rationale applied against claim 14 above.

p.   *Referring to claim 16:*

i.   Chen further teaches:

(1)   wherein said delivery means for delivering said specific related data is an ADSI server and said receiving device is an ADSI device **[i.e., "an ADSI server" is consider a transmitter 120 (as shown in Figure 1) for transmitting "specific related data" and "an ADSI device" is considered a receiver 125 (as shown in Figure 1)].**

q.   *Referring to claim 17:*

i.   Chen further teaches:

(1)   wherein said delivery means for delivering said specific related data is an IP server and said receiving device is an Internet enabled application running on a web enabled device associated with said one or more subscribers **[i.e., "an IP server" is considered a transmitter 120 (as shown in Figure 1) and "an Internet enabled application running on a web enabled device" is considered a receiver 125 (as shown in Figure 1)].**

r.   *Referring to claim 18:*

i.   Chen further teaches:

(1)   wherein said delivery means for delivering said specific related data is a radio transmitter **[i.e., "a radio transmitter" is considered a transmitter 120 (as shown in Figure 1) for transmitting "specific related data"]**.

    s.   *Referring to claims 19, 20, 21 and 22:*

        i.   Chen further teaches:

(1)   wherein said receiving device is an FM radio receiver, a wireless telephone, a page, or a remote control device **[i.e., "an FM radio receiver, a wireless telephone, a page, or a remote control device" is considered a receiver 125 (as shown in Figure 1)]**.

    t.   *Referring to claims 23 and 24:*

        i.   Chen further teaches:

(1)   wherein said delivery means for delivering said specific related data is a television broadcast transmitter or a set top box **[i.e., "a television broadcast transmitter or a set top box" is considered a transmitter 120 (as shown in Figure 1) for transmitting "specific related data"]**.

    u.   *Referring to claim 25:*

        i.   Chen further teaches:

(1)   a transmitter for transmitting said principal program with said watermark embedded therein from a point of origin to a destination **[i.e., as shown in Figure 1, transmitter 120 transmit a host signal into which a watermark signal is to be embedded (column 7, lines 62-63) from computer system 110A, that is "a point of origin" through a communication channel 115 to a computer system 110B, that is "a destination"]**.

    v.   *Referring to claim 26:*

        i.   Chen further teaches:

(1)   delivery means for delivering said principal program to said one or more subscribers **[i.e. as shown in Figure 1, transmitter 120 transmits an embedding a digital watermark signal into a host signal (for example, a particular copy of a software product sold to a customer) (column 1, lines 22-25)]**.

Response to Argument

4.   Applicant's arguments filed February 10, 2005 have been fully considered but they are not persuasive.

Applicant argues that:

Chen does not disclose or suggest any operations performed based on the extracted watermark.

Examiner totally disagrees with the applicant and still strongly maintains that:

Chen teaches the claimed subject matter. Further, embedding blocks may have any configuration, e.g., they need not be rectangles as shown in Figure 4, and they need not be contiguous. In accordance with any of a variety of known, or to-be-developed, techniques, selector 310 identifies those pixels included in embedding block 312C by determining its boundaries, or other indicator of placement within host signal 101, such as offset from the beginning of host signal 101. As described below with respect to **the operations of information extractor 202** _(emphasis added)_, such block identification may be used in a known manner to synchronize received composite signal with noise 105 with transmitted composite signal 103. Such synchronization enables information extractor 202 to identify a block of pixels corresponding to embedding block 312C even if a portion of transmitted composite signal 103 has not been received or is distorted (column 15, lines 64-67 through column 16, lines 1-12 of Chen). Furthermore, the applicant also admits in the remarks that Chen does teach the claimed invention (see last three lines of page 8).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See _In re Fine_, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and _In re Jones_, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the combination of Chen and Moskowitz is sufficient. In fact, Chen/Moskowitz do not need to disclose anything over and above the invention as claimed in order to render it unpatentable or

anticipate. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claimed limitations. For the above reasons, it is believed that the rejections should be sustained.

Conclusion

5.   Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
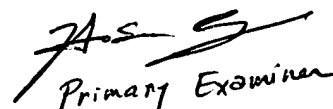
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

TBT

May 30, 2005